

**AMENDMENTS TO THE DRAWINGS:**

The attached drawing REPLACEMENT SHEETS include changes to Figs. 1, 2, and 3. Specifically, as requested by the Examiner, Figs. 1, 2, and 3 have been amended to label the computer 330 as "Controller." In addition, as also requested by the Examiner, Figs. 1, 2, and 3 have been amended such that the "electrical lines" appear as dashed lines, and not solid lines.

Attachments: Three (3) REPLACEMENT SHEETS including Figs. 1, 2, and 3.

**REMARKS**

Applicant submits this Reply to the Office Action mailed November 30, 2006. By this Reply, Applicant has amended claims 1, 5, 6, 8, 13, and 15 and canceled claims 17-20 without disclaimer or prejudice. Applicant also has amended the drawings. Accordingly, claims 1-16 remain pending in this application. The originally-filed application fully supports the subject matter of amended claims 1, 5, 6, 8, 13, and 15 and the changes to the drawings. Thus, the requested claim amendments and amendments to the drawings do not introduce new matter.

In the Office Action, the drawings were objected to "because for ease of understanding and readability, the examiner suggests labeling the computer system block 330 'Controller'." Office Action at page 2. As suggested by the Examiner, Applicant has amended the drawings to label computer 330, "Controller." The Office Action further stated that "the examiner also suggest[s] somehow differentiating the fluid lines and the electrical signal lines in Figs. 1-3 (one option would be to make the electrical lines dashed or dot dash and have the fluid lines remain solid)." Office Action at page 2. Applicant has amended the drawings as suggested by the Examiner so that the "electrical lines" appear as dashed lines. In view of this, Applicant respectfully requests withdrawal of the objection to the drawings.

In the Office Action, claims 1-16 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically the Office Action states that "[t]he claims are vague and indefinite because in each of claim 1 and 8 the housing is set forth as having a 'pair of chambers' and the end covers are set forth as

having ‘a pair of chambers,’” adding that “references throughout the claims, to ‘one of said pair of chambers’ are confusing because it is unclear which of the pairs of chambers are being referred to.” Office Action at page 3. Applicant has amended claims 1 and 8 as suggested by the Examiner. The Office Action also states that claim 5 “is vague and indefinite because it sets forth that the system ‘is used in combination with a reheating system’” and that “this is a statement of desired use of the pump and it is unclear what structure the applicant intends to claim by this limitations and what the structural connection and relationship between the elements would be.” Office Action at pages 3-4. Applicant has appropriately amended claim 5. The Office Action further states that claim 6 recites “the limitation ‘said bore’” and adds that “[t]here is insufficient antecedent basis for this limitation in the claim.” Office Action at page 4. Applicant has appropriately amended claim 6. In view of this, Applicant respectfully requests withdrawal of the 35 U.S.C. § 112, second paragraph, rejections.

Applicant thanks the Examiner for indicating allowable subject matter in claims 2-4 and 8-16. In the Office Action, claims 1 and 5-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,478,552 to Batten et al. (“Batten”) in view of U.S. Patent No. 5,238,372 to Morris. Applicant respectfully traverses this rejection for the reasons provided below.

Applicant submits that Batten either alone or in combination with Morris, does not disclose each and every element of claims 1, 5, 6, and 7. Thus, a combination of Batten and Morris cannot present a *prima facie* case of obviousness because a *prima facie* case of obviousness requires, *inter alia*, that the prior art references, when combined, must teach or suggest every aspect of the claims. M.P.E.P. § 2143.

Batten fails to disclose, among other things, "a free piston pump being operated by said outside source fluid, said free piston pump having a housing having a pair of chambers positioned therein, [and] a pair of end covers having a pair of chambers therein . . . at least a single piston, said piston being slidably positioned in at least one of said pair of end cover chambers, a shaft being attached to said piston said shaft having a first end being slidably positioned in one of said pair of housing chambers," as recited in independent claim 1. Batten discloses "[a] device for pumping a stock fluid by supplying and discharging a motivating fluid unit." Batten, Abstract. Batten appears to disclose only one pair of cavities, that is Batten only discloses two cavities (44, 46). See Batten Fig. 1A. Batten further states that "[e]ach unit 36, 34 includes a stock-fluid port 42, 40; a piston 56, 54 splitting a cavity within each unit 36, 34 into a stock-fluid cell 52, 44 and a motivating-fluid cell 46, 50; and a motivating-fluid port 66, 64." Batten, col. 4, ll. 7-11. In other words Batten discloses only two cavities (chambers). In contrast, claim 1 requires "a housing having a pair of chambers positioned therein, [and] a pair of end covers having a pair of chambers therein." Claim 1 also requires that the shaft has "a first end slidably positioned in one of said pairs of housing chambers." No portion of the shaft 108 of Batten is disposed in a housing chamber.

Morris fails to remedy the deficiencies noted with respect to Batten. Indeed, the Office Action does not rely on Morris for disclosing the above recitations. Rather, the Office Action alleges that Morris discloses "a similar fluid driven pump having a housing with endcaps (43, 36) and a computer (148) responsive to plural sensors (146, 146A)." Office Action at page 5. Even assuming the Office Action's characterization of Morris is correct, which Applicant does not concede, a combination of Batten and Morris would not disclose the above recitations of claim 1. Thus, combining Batten with Morris does

not present a *prima facie* case of obviousness. Accordingly, Applicant requests withdrawal of the 35 U.S.C. § 103(a) rejection of claim 1 and its dependent claims 5-7.

In view of the foregoing remarks, Applicant submits that the claimed invention is not rendered obvious by the prior art references cited against this application. Applicant therefore requests withdrawal of the rejections and timely allowance of all pending claims.

The Office Action contains characterizations of the claims and the related art with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action.

In discussing the specification, claims, and drawings in this Reply, it is to be understood that Applicant is in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and/or shown in the drawings. Rather, Applicant is entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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Dated: March 29, 2007

By:   
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**Attachments:** REPLACEMENT SHEETS (3) depicting Figs. 1, 2, and 3.